Lesson 77 - Gastrointestinal Diseases

- 1. The Gastrointestinal Tract
- 2. Digestive System Disorders
- 3. Questions & Answers
- Article #1: Colitis By Dr. Herbert M. Shelton
- Article #2: Chronic Gastritis By Dr. Herbert M. Shelton

1. The Gastrointestinal Tract

The gastrointestinal tract begins with the mouth and ends with the anus. Disease symptoms may arise anywhere along that route if we do not follow the *Laws of Life*, i.e., if we live unhealthfully. A few of the most common "diseases" will be discussed and the reason for their occurrence. It is not necessary to elaborate upon every disease known, as all diseases stem from a common cause—toxicosis. First of all, it is necessary for you to have a brief review of the function and structure of the normal gastrointestinal tract.

1.1 The Mouth

The tongue, composed primarily of striated muscles and covered by mucous membrane, plays important roles in the mastication of food and in the act of swallowing. The teeth have an important role in the mechanical mastication of food prior to swallowing.

Solid food taken into the mouth is reduced by mastication into smaller particles to facilitate swallowing. Food in the mouth also is mixed with saliva, which moistens and lubricates the food mass. In addition, digestion of starches commences in the mouth by the action of ptyalin in the saliva.

The chief source of ptyalin (salivary a-amylase) is the glands in the mouth. Ptyalin acts most effectively at an optimal pH of 6.7, and it catalyzes hydrolysis of starch into two disaccharides, maltose and isomaltose. In le stomach, ptyalin may act for up to an hour in the center of the food mass before the fundic contents are mixed with acid gastric secretions.

Once pH of the food in the stomach declines below 4.0, the activity of ptyalin is inhibited. Before this inhibition takes place, up to 40 percent of ingested starches will have been converted into maltose by ptyalin. The activity of ptyalin is also inhibited by the presence of protein because he presence of any protein food in the stomach initiates the secretion of the hydrochloric acid for its digestion. Therefore we recommend that proteins and starches not be eaten together.

As digestive enzymes act solely at the surface of food particles, the rate of digestion is related directly to the extent to which food is masticated.

1.2 The Pharynx and Esophagus

The pharynx is the portion of the digestive tract serving is a passageway for both the respiratory and digestive systems.

The esophagus is a long, straight tube extending from the pharynx to the stomach. Passage of food is facilitated by ordinary gravitational forces, as well as by the type and arangement of muscles in the tube itself. It is located between the trachea and the vertebral column. Esophageal glands serve to lubricate

food during its passage from the pharynx to the stomach.

1.3 The Stomach

The stomach is the most widely-dilated portion of the digestive tract. It functions to store and digest food. In the stomach, solid food ultimately is converted into a semifluid mass by contraction of the muscular wall combined with mixture of the food with the glandular secretions of the gastric mucous membrane. Although food in the upper region of the stomach may remain solid for relatively long periods, food becomes transformed into a pulpy fluid mass (chyme) in the lower part of the organ.

Chyme is then ejected into the small intestine in small quantities once a proper consistency has been achieved.

The stomach consists of three parts: the *fundus*, an upper portion ballooning toward the left; a *body*; the central portion; and the *pyloric portion* (antrum), a relatively constricted portion at the terminal end just before the entrance into the duodenum.

The *cardia* is the opening between the esophagus and the stomach. The *pylorus* is the opening between the stomach and the duodenum. The circular muscle layer is thickened in the pyloric region to form the *pyloric sphincter.*

1.3.1 Gastric Juice

Cells of the gastric glands secrete a total volume ranging between two and three liters per day. This digestive fluid contains a number of substances. In addition, gastric mucous cells and glands secrete a thick alkaline mucus that forms a thin coating on the stomach wall. Thus, it is of great importance in protecting the epithelial lining of the stomach.

The gastric glands secrete digestive juices. Of particular significance are the *chief cells* that secrete pepsinogen and parietal cells that secrete hydrochloric acid.

Pepsinogen. The proteolytic enzyme pepsin, which degrades ingested proteins into polypeptides, is secreted by chief cells of the stomach in an inactive form, pepsinogen. When pepsinogen is secreted into the gastric lumen, it contacts hydrochloric acid and pepsin which had been formed earlier. Cleavage of the pepsinogen molecule now occurs so that more active pepsin is produced. Pepsin is active enzymatically only in a highly-acidic medium (optimum pH 2.0); it is inactivated above a pH of 5.0. Consequently, secretion of hydrochloric acid is essential to protein digestion in the stomach by pepsin.

Hydrochloric Acid. Parietal cells of the gastric glands secrete free hydrochloric acid into the lumen of the stomach. These cells can perform the osmotic work necessary to concentrate hydrogen ions to a level of over 4,000,000 times greater than in arterial blood.

Energy for hydrocholoric acid secretion is provided by aerobic glycolysis. That is, the conversion of glycogen into glucose. Energy is needed for the transport of hydrogen ions across the membrane of the parietal cell1. Chloride ion also is secreted actively by the parietal cells.

1.3.2 Histamine and Gastric Acid Secretion

Histamine is a powerful stimulant to gastric acid secretion, and the action of histamine is mediated by cyclic adenosine monophosphate. As the gastric mucosa normally has a high concentration of histamine, liberation of this compound has been implicated as the chemical mediator in stimulation of acid secretions.

Chemical agents in addition to histamine also appear to have a role in acid secretion by the stomach, for example, gastrin.

1.4 The Small Intestine

The small intestine extends from the pyloric sphincter to the cecum, the first portion of the large intestine. It is approximately 18 feet in length and is divided into three portions: the duodenum, jejunum and ileum. The duodenum is the shortest, widest and most fixed portion of the small intestine. It receives secretions of the liver and pancreas.

The small intestine has three major functions: 1) to transport chyme onward from the stomach; 2) to continue digestion of chyme by means of special digestive juices elaborated by intrinsic and accessory glands; and 3) to absorb nutrients produced by the digestion of various foodstuffs.

This organ exhibits two important structural modifications that greatly enlarge the total surface area for absorption of nutrients, but without increasing its total length. These modifications are the grossly visible plicae circulares and the microscopic intestinal villi.

Plicae Circulares. Plicae circulares are permanent ridge-like folds that extend into the lumen of the intestine. The plicae not only increase the absorptive area of the intestine, but also mix chyme and digestive juices and slow the rate of transport of chyme so that more thorough absorption of nutrients can occur.

Intestinal Villi. Intestinal villi are minute flattened (in the duodenum) or fingerlike (in the ileum) projections of the mucous membrane that cover the entire surface of the intestinal mucosa.

1.4.1 Enzymes of the Small Intestine

Many enzymes are found in the small intestine:

1. A number of *peptidases* are present. These substances are proteolytic enzymes that cleave polypeptides into their constituent amino acids.
2. A small quantity of *intestinal amylase* is present. This enzyme converts polysaccharides into disaccharides.
3. Four enzymes are present in the intestinal fluids that split disaccharides into monosaccharides. These include *sucrose*, *maltase*, *isomaltase* and *lactose* (in children).
4. An intestinal lipase is also present, and this enzyme degrades neutral fats into fatty acids and glycerol.

1.4.2 Accessory Digestion Secretions Pancreatic Secretion

Pancreatic secretion

The pancreas secretes between 1,200 and 2,000 ml/day of digestive fluid rich in bicarbonate and a number of enzymes. The pH of pancreatic juice is about 8.0. This alkalinity, together with the neutrality or slight alkalinity of the bile and intestinal juices, neutralizes acidity of the gastric chyme as it enters the duodenum. The pH of duodenal chyme is raised to between 6.0 and 7.0. Therefore, when chyme reaches the jejunum it is approximately neutral. Consequently, the intestinal contents almost never exhibit an acidic reaction.

Pancreatic juice contains a number of potent enzymes for digestion of proteins, carbohydrates, fats and other compounds. The proteolytic enzymes secreted by the pancreas include *trypsin* and two *chymotrypsins*. These enzymes cleave whole and partially-digested proteins. *Carboxypeptidase* is a pancreatic enzyme that attacks peptide chains at their ends, thereby liberating the terminal amino acid with its free carboxyl group. In addition, a *ribonuclease* and *deoxyribonuclease* are present in pancreatic juice. These enzymes split ribonucleic acid and deoxyribonucleic acid, respectively. *Pancreatic a-amylase* hydrolyzes starches, glycogen and many other carbohydrates into disaccharides. However, this enzyme does not hydrolyze cellulose, an important polysaccharide found in plant material. *Pancreatic lipase* hydrolyzes neutral fats into glycerol and fatty acids.

Bile

Bile is secreted continuously by hepatic cells and excreted via a system of ducts into the bile duct and eventually passes into the duodenum.

Bile is a complex fluid containing a number of components. It contains no digestive enzymes, but is of importance in digestion because of the bile salts it contains. Bile salts perform the important task of emulsifying fats in the intestine, thereby increasing enormously the total surface area of these substances exposed to the action of pancreatic and intestinal lipases. Exclusion of bile from the intestine results in a loss of up to 25 percent of ingested fat in the feces.

1.5 The Large Intestine

The large intestine differs from the small intestine in several ways, including its greater width and the following characteristics:

1. There are no villi on the surface of the mucosa.
2. The glands are of greater depth, are more closely packed, and contain many goblet cells.
3. The longitudinal muscle layer of the cecum and colon is limited to three bands, visible on the surface, called teniae coli.
4. Many extensions of fat-filled peritoneum are apparent along the free border of the colon.

The *cecum*, or first portion of the large intestine, is an elongated pouch situated in the right lower portion of the abdomen. Attached to its base is a slender tube, the appendix.

The *ascending colon* extends upward from the cecum on the right posterior abdominal wall to the undersurface of the liver just anterior to the right kidney. The *transverse colon* overlies the coils of the small intestine and crosses the abdominal cavity from right to left below the stomach.

The *descending colon* begins near the spleen, passing downward on the left side of the abdomen to the iliac crest to become the pelvic colon. The descending colon is six inches in length and does not possess a mesentery. The pelvic, or sigmoid, colon is so called because of its S-shaped course within the pelvic cavity.

1.5.1 Large Intestine Secretions

Mucus

The large intestine is provided with enormous numbers of goblet cells both in the glands as well as on the mucosal surface. These cells secrete quantities of a viscous mucus having a pH around 8.0. This is the only major secretion of the large intestine. The mucus serves not only to protect and lubricate the intestinal wall, but to bind fecal material together. The mucus also serves to protect the colon from acids formed by the enormous amount of bacterial activity that takes place in the fecal matter itself.

1.5.2 Water and Electrolytes

Irritation of the intestinal mucosa (e.g., when a drug is taken such as a cathartic) results in secretion of large quantities of water and electrolytes in addition to mucus. This water and electrolyte secretion serves not only to dilute the irritant, but the colonic distension also stimulates rapid movement of the watery feces to the anus, causing diarrhea.

Water and electrolyte loss from a patient can result in dehydration of the body tissues and a severe electrolyte imbalance that can have rapidly fatal consequences, especially in infants.

2. Digestive System Disorders

2.1 Nausea and Vomiting

Nausea and vomiting may occur for several reasons but basically, they are the body's way of telling you that it wants to "close down shop for repairs." When hunger is not present and you are experiencing some nausea, you should not eat. The body must redirect all of its energies for the healing crisis that is going on within you. If food is taken at this time, it most likely will be vomited. Fast until hunger returns and health will be restored at the same time.

Nausea and vomiting will also occur when a poison is taken and the body dispels this substance in the quickest way that it can. This is your body's way of preserving and protecting itself and we should admire and cooperate with its wisdom and not suppress its vital defensive processes with drugs.

The stimulation for vomiting initiates in the chemo-receptor trigger zone, cerebral cortex or vestibular apparatus of the brain or can be relayed directly from peripheral areas of the gastric mucosa. Most antiemetic drugs interfere with these neural pathways. Any time you interfere with normal body activity, you are creating a worse problem (plus the problems of the additional toxins ingested as the drug). Thus, the body may be so devitalized as to be unable to carry out its repairs.

2.2 Dumping Syndrome

"Dumping syndrome" illustrates the severe consequences of surgical interference. This syndrome may follow surgical drainage procedures, particularly with gastrectomy (partial or whole removal of stomach). Weakness, dizziness, sweating, nausea, vomiting and palpitation occur soon after eating. Symptoms of hypoglycemia may occur about two hours after a meal. Usual recommendations include a high-protein diet and increased caloric intake, in the form of frequent small feedings of dry foods. A more rational approach would be frequent feedings of juicy fruits. These foods require no digestion in the stomach and pass through this organ quite rapidly.

After awhile, the body will compensate for its loss, but ideal health cannot be attained after organs have been removed. If you follow the Hygienic/Life Science program, you will not have the surgery that results in this "dumping syndrome."

2.3 Appendicitis

Appendicitis occurs when there is an extreme condition of toxicosis within the body. Under this condition, toxins accumulate in the appendix and inflammation occurs. Most physicians will tell you that "acute appendicitis results from bacterial invasion of the appendix." While it is true that large numbers of bacteria will be found in the appendix of a toxic individual, the bacteria is not the cause of the disorder. The bacteria proliferate where there is an accumulation of toxic debris. Toxins accumulate due to unwholesome living practices.

The usual "cure" for appendicitis is surgery where the appendix is removed. Does this approach remove the cause for the inflammation? No. It removes the most obviously affected organ and cripples the sufferer. When the reasons for the toxicosis are removed, the appendix will heal and health will be restored. However, rest and fasting are essential during the acute phase of this "disease" so that the body will have every chance for repair. Those who have undergone an appendectomy are 17 times more likely to have bowel cancer.

2.4 Peritonitis

Referring to the etiology of peritonitis, the *Merck Manual* says "... the most common causes are the infecting bacteria escherichia coli and streptococcus faecalis; other pathogens and occasionally fungi have been identified. Organisms or irritants escape from the intestinal tract most often following perforation of the appendix or a peptic ulcer. Peritonitis may also complicate any operation j in the abdominal cavity or may result from the spread of pelvic infection into the peritoneal cavity..."

This is the generally accepted concept, but it is an erroneous one. Bacteria and fungi are not causes of peritonitis although they are found associated with this condition, Toxicosis must first exist before inflammation of the peritoneum/begins. Irritants in the form of additional toxins may aggravate the situation. This condition may also be precipitated by the suppression of "disease" symptoms elsewhere, and the body has concentrated its toxins in this particular area.

2.4.1 Signs and Symptoms

Onset of this condition is marked by severe localized or diffuse abdominal pain. In the early stages, moderate abdominal distension is present, usually with nausea and vomiting and occasionally, diarrhea. Direct abdominal tenderness and marked muscle spasm are present. If the causes are not removed at this time, more severe symptoms will appear. They include fever, tachycardia, chills, rapid breathing and leukocytosis. Dehydration and acidosis may develop. The eyes become sunken and the mouth becomes dry; circulatory irregularities can occur.

If causes are not removed and symptoms are continually suppressed, acute renal failure, acute respiratory insufficiency and, sometimes, liver failure, may occur.

2.4.2 Treatment

The usual treatment for peritonitis is antibiotic drugs and intravenous fluids. The rational mode of action is to rest and fast. Fluid replacement is necessary in cases of severe dehydration. If fasting is utilized at the onset of symptoms, recovery will be rapid.

2.5 Diarrhea

Diarrhea is defined as "increased volume, fluidity, or frequency of bowel movements relative to the usual pattern for a particular individual." This is accurate when applied to a normal healthy individual, but when applied to the abnormal pattern of the average unhealthy American, our definition may be somewhat lacking. So we must not look at "average" or "usual" patterns but to the ideally healthy state.

On a healthful fruit and vegetable diet, the stools should be soft but formed. Increase in stool frequency or fecal volume, marked changes in stool consistency, or blood, mucus or pus in the stool indicates that the body is initiating a "disease" (housecleaning) process.

There are several physiologic reasons why the body has chosen this particular route of elimination.

1. *Osmotic diarrhea* occurs when excess nonabsorbable, water-soluble solutes are present in the bowel and retain water in the lumen. This occurs with lactose (due to the absence of lactase), and when such nonorganic salts (magnesium sulfate and sodium phosphate) are taken as saline laxatives. The body dilutes these toxins with increased secretions and quickly eliminates them
   Ingestion of large amounts of the hexitols, sorbitol and mannitol, used as sugar substitutes in dietetic foods, candy, and chewing gum, results in diarrhea by a combination of slow absorption and rapid small-bowel motility. Again, the body in its wisdom moves this toxic material along the digestive tract as rapidly as possible. The severity of symptoms is proportional to the amount consumed and the condition disappears as soon as the cause is discontinued, this is, when intake stops.

2. *Secretory diarrhea.* The small and large bowels normally reabsorb salts and water which are ingested with our food or which reach the lumen as a consequence of digestive secretions. Diarrhea may occur when the small and large bowels secrete rather than absorb electrolytes and water. Substances which induce secretion include bile acids (after surgical interference on the ileum, such as ileal resection); unabsorbed dietary fat when this is taken in excess or in an indigestible form; cathartics, castor oil and other drugs.
3. *Malabsorption.* Malabsorption may result in diarrhea by either of the above mechanisms. In generalized malabsorption, as may occur in severe toxicosis of the small intestine, fat malabsorption (resulting in colonic secretion) and carbohydrate malabsorption (resulting in osmotic diarrhea) can coexist.
4. *Exudative diarrhea.* Some chronic conditions where a state of toxicosis has existed for some time (such as mucosal inflammation, ulceration or swelling) may result in an outpouring of plasma, serum proteins, blood, and mucus, thereby increasing fecal bulk and fluidity.
5. *Altered intestinal transit.* Chyme must be exposed to an adequate absorptive surface of the gastrointestinal tract for a sufficient amount of time if normal absorption is to occur. When there has been surgical resection of the small or large bowel, gastric resection, surgery on the pyloric sphincter, or surgical bypass of intestinal segments, exposure time decreases. Drugs, toxic substances or hormonal agents speed transit by stimulating intestinal smooth muscle.

2.5.1 How to Correct the Reason for Diarrhea

The most effective means of overcoming the uncomfortable and inconvenient symptoms of diarrhea is to fast. The fast in itself does not "cure" this problem. But the fast will provide the conditions under which the body can eliminate the toxic burdens which caused the diarrhea in the first place. Even without a fast, good results can be achieved by merely adhering to a normal Hygienic diet of fresh raw fruits, vegetables, nuts and seeds. The body then has the materials to maintain normal health and repairs will take place. If surgery has taken place, recovery and a return to normal will take longer but the body will compensate for its partially missing organs, although total health may not be possible. In these cases, a normal Hygienic diet of moderate quantities correctly combined is the best course of action.

Above all, avoid all drugs. They will never produce health and will only result in more toxic conditions. Avoid also all refined and artificial food products, and all inorganic salts, minerals, etc.

2.6 Constipation

Constipation is marked by difficult or infrequent passage of feces. On a normal diet of fruits, vegetables, nuts and seeds, constipation will not occur. You need not even give it a thought. When your health is normal, your entire system works normally, including your bowels.

Acute constipation instigates a definite change of bowel habits. If constipation occurs, you should examine your diet and general lifestyle and correct those errors that resulted in this condition. Certain drugs will also result in constipation due to their enervating effect on the organism, especially their paralysis of peristaltic nerves.

Chronic constipation signifies a long-term abuse and general systemic debility. As with all "diseases" constipation should not be "treated" symptomatically but improvements in lifestyle will increase health in general and constipation will be self-corrected. On a normal diet of fruits, etc., you need not worry about getting enough bulk or enough electrolytes and water because they are all there in quantities that are optimal for exuberant health.

The most serious problems arise when any sort of drugs are taken to "remedy" this disorder.

Bulking agents, such as bran, psyllium and methyl cellulose are often given for chronic constipation. Although these agents are less toxic than other drugs given for the same purpose, they are quite irritating to the intestinal mucosa. They are prescribed for their "natural" effects and because they are "not habit-

forming." Why take any agent for a "natural" effect when you can receive better results naturally? That is, on a natural diet. Bulking agents, although not addictive in themselves, can nevertheless become habit forming if a person relies on them instead of correcting those errors that resulted in the constipation in the first place. Taking bulking agents does not remove the cause and it does not build health.

Laxatives and cathartics interfere with absorption of food nutrients. These drugs result in rapid peristalsis of the digestive tract and usually the food particles beyond their optimal absorptive locus. Laxatives and cathartics are divided into several classes:

1. *Wetting agents* (detergent laxatives) soften the stool by increasing the wetting ability of the intestinal water. These break down surface barriers, allowing water to enter the fecal mass, soften it, and increase its bulk. Mineral oil is one example of a wetting agent. Mineral oil itself decreases absorption of fat-soluble vitamins such as vitamins A and E. Serious vitamin deficiencies could result if mineral oil is taken on a long-term basis.
2. *Osmotic agents or saline cathartics* are used to prepare patients for some diagnostic bowel procedures and occasionally in the therapy of parasitic infestations. They contain poorly absorbed polyvalent ions (e.g., phosphate, magnesium, sulfate) and/or carbohydrate (e.g., lactose, sorbitol). Inorganic magnesium and phosphate are partially absorbed and may be detrimental, especially in cases where there is renal insufficiency. The sodium that is present in these preparations is also detrimental. These drugs also upset fluid and electrolyte balance.
3. *Secretory or stimulation cathartics*, such as senna and its derivatives, cascara, phenolphtalein, bisacodyl, and castor oil irritate the intestinal mucosa and result in neuronal stimulation. With continued use, neuronal degeneration in the colon and "lazy bowel" syndrome occur. The normal peristaltic movements of the bowels become less and the person finds that he is taking these drugs with more frequency in order to have daily bowel movements. Serious fluid and electroylyte disturbances result.

The simple answer for constipation is to live normally. When you eat normally, exercise daily, procure sufficient rest, etc., bowel action will also be normal.

2.7 Diverticulosis

Diverticula are small, saccular, mucosal herniations through the muscular wall of the colon. They may occur in any part of the colon, but most frequently in the sigmoid region. Recent evidence confirms that a highly-refined, low-residue diet plays an important role in the formation of diverticula. The lack of dietary bulk is associated with spasm of the musculature of the colon, especially in the sigmoid. Pressure in the lumen builds up and the mucosa eventually pushes through the muscular coat at weak points.

When this condition persists for any length of time, fecal matter and toxins accumulate in the diverticula and inflammation occurs. If causes are not removed and the condition worsens, ulceration may occur with bleeding. With repeated inflammation, the colon wall thickens, the lumen narrows, and acute obstruction may occur.

This condition need not progress to this point. When the body is supplied with the requirements for health, these diverticula will heal and inflammation will subside.

2.8 Dyspepsia

Dyspepsia, commonly referred to as "heartburn" is described as a feeling of gaseousness, fullness or pain that is gnawing or burning and localized to the stomach and esophagus.

Indulgence of alcoholic beverages markedly increases the symptoms of heartburn. A pattern of eating foods that are incompatible in digestive chemistry, such as starches with proteins, may cause the problem.

When starches and proteins or proteins and sugars are eaten together, emptying time of the stomach is delayed. When the delay is rather prolonged, the acid contents of the stomach are regurgitated or backflowed from the stomach into the esophagus. This is very irritating. It can cause the stomach and esophagus to be inflamed and ulcerated.

2.9 Celiac Disease (Non tropical Sprue)

This is chronic intestinal malabsorption caused by sensitivity to the gliadin fraction of gluten, a cereal protein found in wheat and rye, and to a lesser degree in barley and oats. Gliadin combines with other protein fractions within the body to form a new complex in the intestinal mucosa that promote the aggregation of lymphocytes. In some way, this results in mucosal damage with loss of villi and proliferation of crypt cells.

The *crypts glands of Lieberkuhn* are lined by a low-columnar epithelium contiguous with that found on the villi. Cells in mitotic division are abundant in the epithelium of the crypt, and as newly-produced cells migrate upward, they differentiate either into absorptive epithelial ells with striated borders or into goblet cells that secrete mucus. If there is cellular damage of the villi, increased production of crypt cells from the *crypts of Lieberkuhn* will replace these damaged cells.

Symptoms may appear in infancy when the child begins to eat foods containing gluten or may not appear until adulthood. These symptoms are the result of deficiencies due to malabsorption. They may include anemia, weight-loss, bone pain, paresthesia, edema, skin disorders, etc.

Grains do not constitute part of a natural diet for humans. We are biologically frugivores and are adapted to eat fruits, vegetables, nuts and seeds such as sunflower seeds that can be eaten and digested in their raw state. We are ill-equipped to handle the starch and protein found in grains. However, the human body can accommodate to all sorts of diets. This does not mean that we can maintain optimum health on any diet other than our natural frugivorous one. If you become especially devitalized due to additional incorrect living habits, your body may no longer be able to maintain homeostasis. This is when such disorders as "celiac disease" occurs. When it occurs in infants, we must look to the health of the parents and prenatal nutrition for the reason of the disorders. Infants should not be fed anything except mother's milk anyway, and when they are ready to be fed other foods, fruits are in order—not bread.

There is a simple solution to this "disease"—avoid all grains.

2.10 Hemorrhoids

It is estimated that over 40 million people in the United States suffer from hemorrhoids. In a medical study at the world-famous Mayo Clinic, it was found that more than half (52%) of those examined proctoscopically had hemorrhoids. That study was done in 1959. Today statistics indicate that as many as four out of five people over 40 years of age have hemorrhoids.

What are hemorrhoids? Hemorrhoids (piles) are anal or rectal veins that have become swollen and inflamed. Such irritated blood vessels may remain entirely within the rectum where their presence may not be felt. As the condition worsens, they may slip out of the anus as firm projections and are often tender and painful. Discomfort may include itching, bleeding and mucus discharge. Physicians have cited a number of causes for this condition such as constipation, excessive sitting, straining to lift heavy objects, pregnancy and childbirth, excessive coughing or sneezing, etc. It is absurd to even consider any of these reasons for causes of the hemorrhoids.

Hemorrhoids are merely one symptom of total bodily impairment due to general unhealthful lifestyle. Improper diet and lack of exercise are important factors in the development of this condition. Hemorrhoids actually begin, most often, during the teens or early twenties but do not present themselves until a person is in his 30s or 40s. It takes that long for the abuse that we burden our bodies with to exceed the tolerance point. When the body becomes enervated through unhealthful practices, toxins

accumulate in the body, cells become impaired, tissues become weakened, and acute "disease" results.

2.10.1 How Hemorrhoids Develop

To understand how hemorrhoids happen, you have to visualize the veins in the rectum and anus as being at the bottom of a long vertical column of blood. This means that the entire weight of this column bears on these small blood vessels exerting constant pressure. The pressure increases when you strain to stool —particularly if the stool is hard and dry and takes more than usual effort to move out of the rectum. The hemorrhoidal veins are especially thin-walled, so they can expand to four or five times their normal size. After the stool and the pressure pass, the veins slowly shrink back to their normal size. However, if the straining occurs frequently and the veins are especially thin-walled and weak, they will stay swollen and not shrink.

Thus engorged with nonflowing blood, the veins bear the pressure of defecation, causing the hemorrhoidal veins to "pop." Lifting a heavy object can do this too. The swollen veins produce a vague feeling of fullness, perhaps some itching, and even pain. Not only are some hemorrhoidal veins affected, but other blood vessels can rupture and leak blood under the surface. If you continue to have hard-dry stools and keep up the straining, the sack that is the hemorrhoid may tear a bit and leak. As a result you will find fresh, red blood on the toilet paper and even in the toilet bowl.

So what is the solution? Take laxatives? Surgery? If straining or hard dry stools were the irritating cause we must then look to the underlying cause. What caused the constipation? Look to your own violations of life's laws for the answers.

2.10.2 Kinds of Hemorrhoids

There are three kinds of hemorrhoids—external, anal, and internal. External hemorrhoids are located around the edge of the anus. They are not troublesome unless a blood clot forms or the hemorrhoid may be injured and ruptured in this particular type of pile by individuals who assume that it is an internal hemorrhoid that has protruded and attempt to replace it within the anus with their fingers. Since an external pile cannot be displaced, this would be impossible.

The anal hemorrhoid is found within the anal canal and is situated between the external and internal hemorrhoid. The internal hemorrhoid is above the anal canal and is covered by the mucous membrane of the rectum. One great difference between the external and anal and the internal is that there is very little bleeding associated with the external and anal hemorrhoid, whereas bleeding with internal hemorrhoids is often one of the earliest symptoms.

2.10.3 Blood Clots

A blood clot (thrombosed hemorrhoid) occurs when the vein has ruptured and some blood has escaped into the surrounding tissue. This condition causes considerable pain and tenderness in the immediate area.

Blood clots may appear at three different locations in the area of the anal canal:

1. *Beneath anal skin*—The type of blood clot most frequently experienced is that which develops beneath the modified anal skin (just within the anal opening). The swelling causes the clot to bulge outside the anus. This bulge has the appearance of a firm grape, being tender to the touch and impossible to permanently tuck back within the anus. This swelling causes pain similar to that of a large blood blister. This condition is often referred to as an "attack of hemorrhoids" or a "swelling of hemorrhoidal tissue due to inflammation." Hemorrhoids do not "attack" you, they are developed due to a toxic condition that undermines blood vessels' vitality.
2. *Beneath mucosa*—When the blood clot occurs beneath the mucous membrane lining of the anal canal, it is rarely noticed due to the lack of sensitivity of that tissue.

3. *Beneath external skin*—Blood clots may also appear in tissue that is completely outside of the anus. This is often the result of prolapse of a strangulated internal hemorrhoid which obstructs the circulation, thereby causing clotting to occur in the adjacent external mass. This form of blood clot can be extremely painful.

Blood clots will always disappear on their own without any outside "assistance." The body's innate wisdom knows how to take care of such abnormalities. This fact is taken advantage of by many drug manufacturers. When a person purchases a product that is claimed to "relieve hemorrhoidal symptoms" and the pain does, indeed, go away, the product is given the credit. If nothing was done at all, the pain would disappear equally as fast if not faster.

On August 28, 1964, the Federal Trade Commission filed a complaint alleging that American Home Products (the manufacturer of Preparation H) was guilty of making "false advertisements" implying "that the use of Preparation H Ointment and suppositories" would:

1. Reduce or shrink piles;
2. Avoid the need for surgery as a treatment for piles;
3. Eliminate all itch due to or ascribed to piles;
4. Relieve all pain attributed to or caused by piles;
5. Heal, cure or remove piles, and cause piles to cease to be a problem."

The government called nine qualified witnesses, each specializing in proctology. During the testimony before the hearing examiner, it was noted that the discomforts of hemorrhoids frequently subside spontaneously. Dr. Hopping said, "Nature and the resources of the body frequently take care of the immediate acute situation and heal it in the course of time. They (the drugs) don't heal the hemorrhoids." Another witness, Dr. Eisenberg, said during testimony, "Just mother nature and time, both of which are excellent helpers, and we see patients many times who have made appointments for an acute episode of what they call hemorrhoids and if we are not able to see them for several days, by the time they come in, much of their symptomology has been relieved, spontaneously, though they have done nothing. So we know from experience that many of these complications will subside spontaneously."

2.10.4 Why You Have Hemorrhoids

Concerning the reason for this condition, Susanna May Dodds, M.D. states, "The predisposing causes of this affection are essentially the same as of constipation; the habitual use of seasonings and condiments, or of fine flour bread or other concentrated food, is a leading factor in either case."

Instead of examining the general lifestyle, most people take medications to suppress the symptoms of hemorrhoids. Besides being almost totally ineffective, much harm may result. It has been estimated that at least ninety out of each hundred persons who use these specifics for the "cure" of their hemorrhoids, are decidedly injured by their use, and the remaining ten, though not sensibly injured, are not sensibly benefited. The reason for this failure to "cure" the piles by specific medication grows out of a misunderstanding of the nature of disease. Physicians have led people to believe that disease is local in its origin as well as in its nature. In truth, piles are of a secondary nature resulting from a general toxic and enervated condition of the body.

When drugs are administered for any reason, the body attempts to relieve itself of these powerful poisons. As this practice is repeated, the body becomes more and more enervated, all organs become depleted of vital energy, bowels become sluggish and constipation results. Subsequently, inflammation of the very lower portion of the bowel sets in that eventually gives rise to hemorrhoid formation.

When enervation and toxicosis do not result from taking poisonous medications, they are very likely to occur when the individual leads a sedentary lifestyle, uses concentrated and refined foods, eats foods that are highly seasoned and stimulating, and neglects the other requirements for health. When such enervating habits are persisted in, the bowels become deranged and the nervous energy upon which all activity depends becomes deficient. Congestion of the blood vessels occurs and soon tumorous-type

growths appear and become excessively painful. Whenever the person experiences a bowel movement, the veins become large and under the pressure of the sphincter muscle, become so overloaded with blood and toxic material that this pus and fluid escape and the person has what is called "bleeding hemorrhoid."

2.10.5 What to Do If You Have Hemorrhoids

Dr. James C. Jackson supervised many chronically sick individuals at his institute at Dansville, New York. His natural approach to health produced beneficial results in every case. Concerning hemorrhoids, he said:

"Let these rules then, be laid down for the treatment of piles:

1. Purgatives should never be taken. Persons who take internal medicine for piles make a mistake. No one is ever benefited by them, nor is there any real benefit derivable from any one of the panaceas. Quack medicines are all delusions, thorough cheats, doing no good. If one is relieved thereby he is, as I have before stated, more likely than not to have, as a substitute for the piles, a disease still worse.
2. Whoever having piles would get rid of them must eat unstimulating, simple food. Meats, cakes, dressings of rich gravies for the table, must be abandoned, and in their place vegetables and fruits substituted. Then, if the person is so situated as not to overtax the nervous system by labor or thought, and can give to himself or herself plenty of time in the open air whereby to re-invigorate the blood and make it pure, there is good chance that the person may recover."

Since hemorrhoids develop due to a general condition of toxicosis, you should consider the body as a unit and aim for total health. In other words, when general health is achieved, the hemorrhoids will disappear on their own. This can be achieved only through healthful living.

3. Questions & Answers

Does constipation cause hemorrhoids?

> It is a common conception that constipation causes hemorrhoids and so laxatives are taken. The fact is, constipation does not cause hemorrhoids. It may be an irritating factor resulting in bleeding of the hemorrhoids if the stools are very hard but it is not a causative factor. The bowels are sluggish due to debility of the colon resulting from general systemic enervation and toxicosis.

Why are you against the use of all types of laxatives?

> The use of laxatives leads to the very condition they are claimed to remedy. *The Handbook of Nonprescription Drugs* (1973) states: "Chronic constipation frequently begins during adolescence. The use of laxative agents probably plays a significant role. Many persons begin the use of such agents while in their teens. By the time they become adults, many persons cannot remember when they could maintain themselves without a laxative agent ..." The editors of *Consumer Reports* tell us: "The misuse of laxatives is another important cause of chronic constipation. Moreover, there are comparatively few users of cathartics (laxatives) who have not suffered from fissure of the anus or hemorrhoids. If you think you have chronic constipation, the first thing to do is stop taking laxatives."

Mineral oil is one of the most frequent ingredients in laxatives. The dangers associated with its ingestion include:

1. Chronic constipation.
2. Incompetence of the ileocecal sphincter (this sphincter's function is to prevent backflow of fecal content from the colon into the small intestine).
3. Rectal leakage and resulting irritation.
4. Malabsorption of nutrients.
5. Foods remain in the stomach longer, resulting in putrefaction and fermentation with by-products of toxin bacterial metabolism.
6. Lipid pneumonia, a condition where mineral oil has coated the pharynx, thereby gaining access to the trachea and then the lungs

As you can see, much harm may result from taking laxatives. This is a fragmented approach anyway. You cannot achieve health by palliating symptoms. You must examine your total way of living and correct those errors that caused sickness.

Should I take bran to ensure regular bowel movements?

Many articles and books have been written about the necessity of fiber in our diet. Bran has been claimed to be the ideal fiber to alleviate constipation and to prevent its reoccurrence. A high-fiber diet is supposed to prevent cancer of the colon and assorted other ailments. This again is a fragmented approach with a fragmented food

Bran is the outer fibrous layer of grains. It is entirely indigestible and passes through the intestinal tract virtually unchanged. Bran does absorb water in the large intestine and this is why it is thought to be a "sure cure" for constipation since more bulky stools result

Constipation is an indication of total ill health. It is not a separate "disease" in itself or an occurrence that is independent from the rest of the body. When we eat the wrong food, get insufficient rest and sleep, lead a completely sedentary life and disobey the other requirements for health, our entire body is affected. All bodily systems will eventually become weakened and this includes the bowels and constipation results

It has been suggested that if a person prefers a diet devoid of the natural fibers found in vegetables, fruits and nuts, then bran should be consumed. This is nonsense. There are few people who would not rather eat a juicy piece of watermelon, or a nice sweet orange or a ripe banana than some dry tasteless bran. The fresh fruits will not only provide us with a delightful meal but will supply all necessary nutrients needed to maintain total health. A vital body and colon have no problems

In addition to being a fragmented food in itself devoid of calories and nutrients, bran is very irritating to the intestinal tract. There are many sharp protrubances on the bran that cause intestinal irritation. Also, a great deal of vital energy is needed to eliminate this worthless fiber. It takes a minimum of twenty-four hours to process bran once it has been ingested

Wheat and other grains contain large amounts of phytic acid. This compound reduces the absorption of iron in the small intestine. Consuming bran in the amount usually recommended (about one tablespoon before each meal) may result in iron deficiency due to being bound by phytic acid.

Article #1: Colitis by Dr. Herbert M. Shelton

The colon functions by carrying the residues of digestion upward from the cecum, across the transverse colon, and downward through the sigmoid to the rectum and to the outside world. Digestion is completed in the small intestines and it is there that the digested portions of the food are absorbed. Some water and electrolytes may be absorbed from the colon, but there is no further absorption of food. There is no absorption of toxins from the colon unless abnormal poisons are put there, e.g., caffeine, allicin, mustard oil, mercury, strychnine, etc.

The colon, like the rest of the alimentary tract, is lined with a skin or membrane that is called mucous membrane. Irritation or inflammation of the colon is known as colitis or colonitis. Supposed by some authorities to be perhaps the most common disease of civilized man, colitis is asserted to be very rare among uncivilized peoples. Constipation is perhaps the most annoying symptom of colitis, although it is likely to be alternated with diarrhea. If the colitis is acute (diarrhea) there may be mucus in the loose, watery stools. All the forms of colitis discussed in this article come under the general technical classification of "mucous colitis."

A state of spasm of the colon is common in cases of colitis, especially if the condition is marked. Frequently, also there is a sagging of the transverse colon—enteroptosis. The colon may sag in the absence of colitis and colitis may exist without sagging, but spastic colitis is almost certain to accompany both conditions.

It is a mistake, however, to think of spastic constipation as the cause of mucous colitis. This view is no more rational than to think of colitis as the cause of spastic constipation.

In chronic colitis the more marked inflammation may be located at different parts of the colon, the acute exacerbations of which will be named after the location of the more severe inflammation, as sigmoiditis, proctitis, etc.

For long periods the condition may be obscure, the individual merely being conscious of abdominal distress, which he may attribute to constipation or to gas. When mucus appears in the stools, the condition is already well advanced. As the colitis becomes more marked the mucus may appear in the stools in masses of jelly-like consistency, in suspicious looking ropy shreds like casts of the bowels, or the feces may be coated with mucus and this may be reaked with blood. There is now no mistake that colitis is present.

I do not intend here to attempt to cover all the variations from the common picture of colitis. These may occur often, but for all practical purposes, they are of little significance. As the colon is divided into a few sections, it becomes possible to have such special forms of colitis as proctitis, sigmoiditis and others, but the so-called disease is the same in each case.

Let us look at the two "diseases" just named. There is no actual dividing line between the sigmoid and the rectum. If we imagine a hairline dividing the two continuous sections of the colon, we may recognize the folly of naming inflammation on one side of this line sigmoiditis, and, if it extends only an eighth of an inch over the line into the lining membrane of the rectum, calling this proctitis. It is like naming pimples on the left cheek one disease and pimples on the right cheek something else.

We make the same confusing classifications of inflammation according to locations throughout all parts of the body. Inflammation of the lining membrane of the nose is rhinitis, inflammation of the lining membrane of the nasal sinuses is sinusitis, inflammation of the bronchial tube is bronchitis; but these are only different names for precisely he same condition in the different locations. Gastritis is he same

condition in the lining membrane of the stomach. To call all of these local inflammations different diseases is only to add to growing confusion.

Often great skill is needed to diagnose correctly the form of colitis with which the patient suffers, and to detect just where the inflammation is located. Skill in diagnosis may not indicate familiarity with cause. The greatest diagnostic technique is often harnessed to the most ineffective means of mere palliation.

We are here more interested in what is causing the patients trouble than in what particular section of the colon is irritated or spastic. Symptoms of colitis are alike in kind, differing only in location and degree. One significant fact that has received much notice is that every case that presents the marks of chronicity has a *colon complex*; that is to say a negative or *depressive psychosis*.

People who are ill or who suffer are rarely cheerful and happy. Anxiety, apprehension and consequent depression form the rule in sickness of every nature. It is rarely possible for one to remain mentally or emotionally indifferent to physical discomfort. A certain measure of self-pity creeps into the consciousness of the most sanguine and stoical. When we consider the nature of colitis, it is not surprising that the sufferer becomes depressed and anxious. Many so-called neurotics and psychotics are such only because of long-standing colitis.

In at least 95% of cases of chronic colitis, constipation is an outstanding feature. It frequently continues over a period of years, during which time the sufferer tries laxatives, purgatives, teas, oils, enemas, colonic irrigations and other means of securing "relief" from his constipation, never once realizing that the constipation is only a symptom. Although these measures often afford some temporary relief, they serve, in the end, to aggravate greatly the condition.

All colitis sufferers complain of indigestion, both gastric and intestinal, and of rumbling of gas in the intestines, with more or less pain, sometimes of a colicky nature. They have a sense of fullness and uneasiness. Commonly there is a dull and constant or sharp and intermittent headache. Marty of these patients complain of a feeling of stiffness and tension, even pain, in the muscles of the neck, often with pain just below the juncture of the neck and the head.

Frequently colitis sufferers describe their symptoms as a "drawing" sensation." Most of these cases appear anemic and dysemic. They are thin and undernourished, as a rule, although colitis is by no means confined to the properly nourished. The tongue is commonly coated, the tastes unpleasant, and the breath offensive.

There may be a feeling of extreme exhaustion with a lack of enterprise and ambition. Nausea may develop immediately upon the expulsion from the colon of a large accumulation of mucus. Invariably this is followed by a feeling of great relief.

In colitis the facial expression is one of dejection and misery, frequently combined with anxiety, although many try bravely to repress their feelings, while others appear to be in a constant state of unconcealed apathy. The patient may become very nervous, irritable, excitable, even border on melancholia and hysteria.

Not only a trial to themselves, they become a trial to everyone about them. In severe and long-standing cases, the patient's whole thinking centers on his physical state. Few conditions can compete with colitis in engineering obsessions.

Many colitis sufferers become habituated to the taking of drugs. They try everything that is advertised as a remedy. They exhaust the list of laxatives, cathartics, tonics and digestants. They go from one physician to another, studying their symptoms and confusing their feelings. Enemas, cascades, irrigations, different methods of dieting and psychiatrists are all tried in vain. Some study anatomy, physiology and foods and acquire an extensive technical vocabulary, often quite meaningless.

It has been suggested more than once that the milder types of insanity often have their origin in colonic irritation. At least mental diseases requiring restraint have evolved in colitis sufferers. Such cases at least make it clear that the mental reactions to colitis are real and not mere fancies. One man of great

prominence gives as his opinion that a chronically-diseased colon forms the basis of more mental and physical troubles than any other single functional abnormality.

Most important in caring for the sufferer with colitis is to ignore symptoms and the acute exacerbations, and to recognize and remove the cause of the suffering. We are fully convinced, that the development of colitis is concomitant with the retention of toxic waste and its accumulation in the blood and lymph. Whatever will free the body of its accumulated toxic load will prove adequate care for the colitis sufferer.

The mind of the patient and the mind of the one who cares for him must both be freed from the tyranny of local symptoms. The discomforts must be persistently minimized for the reason that the mucus, the gas, the rumbling, the spasticity, the constipation and the nervous irritability are neither singly nor collectively the cause of the trouble.

Recovery cannot be expected without complete and prolonged rest, away from friends and relatives and away from the enervating environmental factors. Physical rest means going to bed and remaining there. It means ceasing physical activities and relaxing. Mental rest requires poise. It means the elimination of worry, fear, anxiety and depressing emotions. Sensory rest requires quiet and freedom from sensory excitement. Physiological rest can be obtained only by going without all food. Fasting soon results in a relaxation of the spastic bowel and stomach.

Instead of bulk-free diets, a fast is indicated. Fasting speeds up that part of metabolism that eliminates waste and rejuvenates fatigued nerve and cell structure. It permits the body to establish a normal blood chemistry in its own inimitable manner. No man understands how to establish a normal blood chemistry. No one can either duplicate or imitate the ways of the body in re-establishing its normal blood chemistry.

The continual irritation of the bowels by drugging can only add to the suffering of the patient, as this makes the condition worse. Medicated enemas are highly irritating. Enemas containing soapsuds, molasses and other such substances are also to be condemned.

It is important to know that colitis is but a part of a general irritation and inflammation of the mucous surfaces of the body (just a few years ago it would have been called a general catarrh) and that whatever frees the patient of his colitis will, at the same time, free him of his other itises in other regions—in the nose and throat, in the womb or in the bladder, to name a few local mucous membrane inflammations.

The common condition called diarrhea is simply a colitis of short duration. Not serious in the average case, and lasting but a day or two (to a few days) it is the rule of many to neglect the state of the colon and resort to means of suppressing the diarrhea. Often the condition is nothing more than a temporary irritation of the bowels by unsuitable or fermenting food. This is especially true when it develops in children. But repeated crises of this kind tend to evolve chronic colitis.

As long ago as 1918, Richard C. Cabot, M.D., of Harvard University Medical School and the Massachusetts General Hospital, wrote in his book for social workers, *A Layman's Handbook of Medicine*: "Simple diarrhea or acute colitis of adults gets well as a rule in a week or ten days. The important remedies are rest and warmth and starvation." He indicates that this same care is best for infants and children, although he thought that a purge at the outset of the diarrhea should help. The important thing for us to note, however, is the recognition of the value of the fast in diarrhea. I think it should be added that a week to ten days constitutes more time than is required for most cases of diarrhea to come to an end if fasting is instituted at the first sign of diarrhea. Often two or three days are enough.

Amoebic dysentery is a form of colitis that is said to be caused by an amoeba. It is quite common in many parts of the world and I have had opportunity to handle a number of cases coming to me from Mexico and South America. I do not think that the dysentery is caused by the amoeba, but I am convinced that the amoeba and the medication aimed at this microbe tend to perpetuate a disease that, initially is but a simple inflammation of the bowel. The disease would "run its course" in a week to ten days in almost all cases, if not complicated by feeding and drugging.

When the true cause of the disease is understood and removed, a speedy return to health follows; but if these cases are treated in the usual manner, the disease may last for years and end in death. Drugs to kill amoeba, medicated enemas to kill parasites—these build ulcerative colitis and proctitis. The fact is that the war that is supposed to be made on the amoeba too often kills the patient before the disease is controlled. Some day amoebicides, parasiticides and germicides will be given up. as they tend to kill the patient too.

Instead of making war on the amoeba, the fast provides an opportunity for the body to cast off its nutritive redundancy and its toxic load and the diarrhea comes, to an end. Whatever part the amoeba plays in the causation of the disease, it cannot be specific nor can it be primary, as this microbe ceases to annoy when the fast has progressed for a few days.

Two lovely young girls of the same family, citizens of this country, but living with their parents in Mexico City, where the father was stationed, developed a sickness diagnosed as amoebic dysentery, a disease very common in Mexico.

They had been treated in the regular manner: Drugs to kill the amoeba and plenty of "good nourishing food." In spite of the drugs, perhaps because of them, the dysentery persisted; in spite of the "nourishing food," they continued to lose both weight and strength. Their parents began to despair of their lives. They knew of deaths in the disease in Mexico and began to fear that they were going to lose both of their daughters.

Then a New Yorker visited the family. He told them of Natural Hygiene and urged them to. give it a chance to restore the health of the two girls. The mother brought them to this country, where they were given a fast of only one week each.

The diarrhea ceased, they became more alert and developed a demand for food. The sisters were fed on a diet of fresh fruits, nonstarchy vegetables and minimum quantities of proteins. Their recovery was rapid and they put on weight on a diet that would not ordinarily sustain weight. Now after the passage of more than fifteen years, these two young ladies are still enjoying excellent health.

Ulcerative colitis is but a further evolution of mucous colitis. The chronic inflammation has resulted in hardening and ulceration of the membrane of the colon. Severe ulcerative cases may evolve out of acute colitis, but this is not the rule. Those who carry out the instructions given for mucous colitis will not evolve ulcerative colitis.

In a syndicated newspaper article published October 24, 1962, Walter C. Alvarez, M.D. declared that chronic ulcerative colitis is "unfortunately ... a disease which we physicians do not understand well. We don't know for sure what causes it." He explains that no germ or virus has been found that can be blamed as causing the often severe diarrhea and says that some cases seem certain to start with a nervous cause, such as an unhappy marriage. He adds that some physicians are sure that the disease begins and is kept going by "an allergic sensitiveness to some food or foods." Then he says: "However it starts, it often ends with a bad ulceration of the inner lining of the large bowel."

The patient develops fever, there is diarrhea with blood and pus in the feces, and, eventually, the colon shrinks and becomes deformed and shortened. In ulcerative colitis, constipation frequently alternates with diarrhea. This condition may evolve after years of suffering with chronic colitis or it may evolve immediately after a severe acute inflammation of the colon.

In either case, it is correct to say that when colitis has passed through the successive stages of irritation, inflammation, ulceration and induration, it is ready for the evolution of cancer, which needs but the addition of a continuous bath of decomposition from excess and unsuitable food. It is essential to understand that all chronic forms of inflammation begin with irritation, followed by inflammation and ulceration. If the location favors stasis—stoppage of the blood flow—induration and cancer follow. In its origin, irritation is absolutely innocent of all taint of malignancy, hence there is no reason why it cannot be remedied.

When ulcerative colitis is established, cancer is not far away. Indeed, the objective symptoms of cancer and ulcer are far from pathognomonic—that is, undeniably proving the presence of either. But there seems to be no reason to doubt that eating to the point of keeping the colon and rectum saturated with putrefaction is the one and only way to complete the evolution of cancer of the bowel. The beginning of the trouble is simple inflammation, which is absolutely innocent of all taint of malignancy until the diseased membrane of the colon or rectum has been mascerated, so to speak, in a continuous bath of decomposition.

The care of chronic inflammation of the colon and rectum should be successful at any stage before the beginning of malignancy. After the malignant stage is reached, hope flies out the window. This is to say, when colon disease has evolved through irritation, inflammation, ulceration and induration to cancer, any remaining possibility of recovery is wrecked by methods of diagnosis and treatment that set up psychosis or mental depression as deadly as cancer itself. Operation for cancer of the rectum or colon, making an artificial anus above the cancer, a questionable palliation, creates a blind pouch out of the cancerous portion of the colon or rectum, thus producing a miniature gehenna within the patient's body.

Alvarez says: "In a few cases, if no medical treatment helps, as the last resort the colon can be removed surgically." The drug treatment he describes is purely symptomatic: barbituates to enable the patient to sleep, copavin or codeine to "quiet" the bowels and "give rest," extra fluids, and "some iron" for his anemia. He recommends antibiotics and cortisone-like drugs for other symptoms. One gets the idea that "treat the symptoms as they arise" is still good medicine.

Reverting to the article by Alvarez, he also says: "... the patient should be kept in bed awhile, on a liberal diet, and one tasty enough so that he will eat it, and not leave it on his plate. He must have enough food and vitamins so that he can keep up his nourishment."

This is a slightly different way of expressing it, but what he says is only a restatement of the old advice that the patient must "eat plenty of nourishing food to keep up his strength." Eating prevents the bowel from healing and keeps alive the disease process. If the fast were instituted at the outset of the diarrhea, the formation of the ulceration could perhaps be avoided.

The remainder of the advice as to treatment which is given by Alvarez may prove enlightening. He says: "He will probably need barbituates so that he can sleep at night, and he should have copavin, or codeine, to quiet his bowels and give him rest. He may need extra fluids, and he may need some iron for his anemia. One authority on this disease, Dr. J. A. Bargen of the Scott & White Clinic of Temple, Texas, gives an antibiotic, Azulfidine, which helps in some cases. Dr. Kirsner, of the University of Chicago, Dr. Ingelfinger, of Boston, and other authorities get results in some cases by giving cortisone-like drugs for a while. In a few cases, if no medical treatment helps, as a last resort the colon can be removed surgically."

Apparently from this, the authorities are floundering about, trying first one thing and then another, hoping that something may prove to be of value. But without a knowledge of cause, there is nothing constructive that they can do. To remove the colon as the last resort certainly does not remove the cause of the suffering. It seems to be an open confession of failure.

It is essential to understand that irritation is absolutely innocent of the taint of malignancy, hence there is no reason why it should not be remediable. Malignancy is the ending, not the beginning of the pathological process. Those who carry out the instructions given for mucous colitis will not evolve ulcerative colitis.

Reprinted from Fasting Can Save Your Life

Article #2: Chronic Gastritis by Dr. Herbert M. Shelton

The old term, catarrh, has fallen into disuse. We no longer hear of catarrh of the nose, but rhinitis, not of catarrh of the womb, but of metritis, etc. In like manner, the old terms, dyspepsia, and catarrh of the stomach have been supplanted by the term chronic gastritis, meaning chronic inflammation of the stomach. One may have acute inflammation of the nose, as in what we used to call nasal catarrh. In like manner, inflammation of the lining membrane of the stomach may be either acute or chronic. Chronic (from *chronos*—time) is a term applied to lingering diseases. The symptoms of chronic diseases are commonly not as severe as are the symptoms of acute disease.

There are many and varying degrees of chronic gastritis from that which passes almost unnoticed, and manifest only by a coated tongue, bad breath and a slight uneasiness following meals, to the case of the man who spends much of his time searching for a drug which will relieve or a food that will agree. Customary habits of eating entail so much wear and tear upon the stomach that there are but comparatively few people who do not suffer with more or less indigestion with the resultant irritation of this organ.

The almost universal practice of overeating, of eating at all hours of the day and night, of eating improper food, and of eating wrongly-combined foods, coupled with the practice of taking drugs to "relieve" the consequent discomfort and distress, is the chief, though not the only cause of chronic indigestion and chronic gastritis. The human stomach, especially in this country, is almost always overburdened by overeating and by eating in such a manner and under such conditions that digestion is retarded.

Too frequent eating is as great a source of gastric irritation as the habit of overfilling the stomach at each meal. There may be occasional exceptions (although this may well be doubted), but eating three times a day is too often. This is especially true when each meal is a banquet. Most men and women can eat a breakfast of fruit, a light lunch and a heavy evening meal, but when they eat a hearty, breakfast of bacon and eggs, toast, cereal and milk, fruit and other foods, a big meal at noon and another big meal in the evening, they are sure to overeat. Such eating does not permit the stomach sufficient rest from one meal to the next.

While, perhaps overeating and eating food combinations that impede normal digestion may be regarded as the chief causes of chronic irritation of the stomach, the habits of eating in a hurry, failure to properly masticate the food, eating hot and cold foods, eating when fatigued, when emotionally stressed, when cold, and the practice of eating a hearty meal and returning immediately to work, impede the digestive process. All such abuses help to lay the ground work for disease of the stomach.

While taking such *stimulants* as tea, coffee, and cocoa, and such *narcotics* as tobacco and alcohol contribute towards the causation of gastric impairment, the habit of using condiments is often worse. Acrid sauces, burning peppers, pungent spices, stinging mustard, mordant vinegar, biting alcohol, irritation-causing salt—when, how, and why did man begin the practice of abusing his digestive system with these piercing, caustic substances? Curry and cayenne, mustard and horse radish, chili and tobasco sauce, whiskey and gin—what unfit substances to introduce into the human stomach! They have no food value, are indigestible and retard the digestion of the real foods. When taken regularly, they keep the stomach in a state of chronic inflammation. They damage the intestines and liver also. They lack a single redeeming feature and none of the defenses of their "use" are valid.

It should be understood that any act, habit, or indulgence that lowers functioning power, this is to say, anything that causes enervation, will lessen digestive function and pave the way for the evolution of chronic gastritis. Overwork, loss of sleep, lack of rest, stimulation, food deficiencies, emotional stresses, etc., by lowering the power of the nerves to maintain normal function, produce indigestion.

Chronic gastritis frequently follows upon the heels of recurring acute gastritis. This tendency of acute

gastritis to become chronic grows out of the fact that the causes of the recurring acute crisis are not removed. As soon as the sufferer recovers from acute gastritis, he begins again to build the condition all over again. Both forms of gastritis are due to the same cause or causes. Acute gastritis is more common in the young; chronic gastritis is more often found in adults.

Chronic gastritis often follows acute diseases, such as typhoid fever and dysentery. In these instances the gastritis, except the initial acute gastritis that is sure to be present, is most likely caused by the drugging for dysentery and typhoid. Drugging in acute disease frequently so impairs the stomach that chronic gastritis evolves. Feeding in acute disease doubtless assists in the development of chronic gastritis. In like manner, the chronic gastritis that is said to be caused by arthritis, gout, etc., is due, in large measure, to the drugging. Aspirin, for example, has a very irritating effect upon the stomach. When chronic drugging is added to the wrong feeding and other causes of disease in these diseases, chronic gastritis is almost inescapable.

The drugs employed in treating acute and chronic diseases are not the only ones that damage the stomach and cause chronic gastritis. The drugs commonly used with which to smother the effects of big dinners and other common abuses of the stomach—bicarbonate of soda,, milk of magnesia, Alkaseltzer, Rolaids, Turns, Pepto-Bismol, etc.—as well as those drugs usually employed in the treatment of chronic gastritis, damage the function of the stomach, occasioning irritation, exhaustion, and impeding the work of digestion. The temporary "relief" they afford is paid for at a fearful price, even including in its costs gastric ulcer and cancer.

Belching (eructation) of gas, sour and fermenting foods, bitter substances, a condition commonly called "heart burn," the gases often searing the throat and nose, a bad taste in the mouth, a coated tongue, foul breath, discomfort in the stomach, often a frontal headache, diarrhea or constipation or both, alternately, weakness, an "all gone feeling," a finicky appetite or no desire for food at all, a feeling of fullness, bloat after meals—these symptoms continuing, often for years, make the life of the man or woman who has chronic gastritis one of misery.

A capricious appetite, inability to eat certain foods that do not "agree," periods of excessive hunger, loss of weight from malnutrition, palpitation of the heart from gas pressure, pains in the chest from the same cause, sometimes difficulty in breathing from gas pressure, weakness, inability to sleep, mental depression, melancholia, "nervousness," even in some cases, mild mental symptoms, the degrees and combinations of symptoms varying with individuals, almost completes the picture of the misery of what our grandfathers called the "dyspeptic."

To carry the picture a bit further, however, let us briefly think of the case in which thickening of the pyloric membrane results from the long-continued irritation and inflammation. This obstructs the pyloric valve (the valve opening to let the digested food pass into the intestine), thus preventing normal emptying of the stomach, with the resulting pains of obstruction. The treatment of this is usually the gastroenterostomy, or the formation of a fistula between the stomach and the duodenum, thus bypassing the pyloris.

This is the same of medico-surgical malpractice. It is as easy to reduce a thickened pyloric mucosa (membrane) by fasting as it is to reduce a thickened membrane in the nose that obstructs the nasal passage and compels mouth breathing. We can watch the process in the nose; we can "see" it in the stomach only symptomatically. We can see the symptoms of pyloric obstruction clear up and normal emptying of the stomach take place.

Perhaps no state of impaired health is more responsive to the physiological rest than chronic indigestion. It should not be necessary to have to say that all causes of enervation, all causes of impaired digestion, all causes of stomach irritation should be removed. No recovery of health is possible so long as these remain. Remove these causes and provide the disabled stomach with a much-needed rest and it will repair its damages, recuperate its forces and begin to function normally again.

Do not get the idea from this that the process is simple in long-standing cases. Some of these victims of

abuse recover slowly and with many "set-backs," so that much skill is required to pilot them back to good health. Feeding after the fast is specially important and often presents problems. Blanket diets, cut-and-dried feeding formulas, feeding programs based on the laboratory fallacy that every man and woman, regardless of his or her peculiarities, occupation or digestive capacity, should eat a certain amount of certain kinds of food each day, all meet their Waterloo in chronic gastritis.

Eating must be moderate, sometimes but two meals a day and in occasional cases, but one meal a day. Correct combinations must be rigidly adhered to, the meals should be simple and all articles of food with which the individual has difficulty must be excluded from the diet. Rest and sleep are highly important, as is exercise at the right time and in keeping with the strength and endurance of the sufferer. Fresh air and sunshine and a peaceful, poised mental atmosphere help immensely.

Reprinted from Dr. Shelton's Hygienic Review, Feb. 1966